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PASSWORD:
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* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	MAY 01	New CAS web site launched
NEWS 3	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 4	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS 5	MAY 21	BIOSIS reloaded and enhanced with archival data
NEWS 6	MAY 21	TOXCENTER enhanced with BIOSIS reload
NEWS 7	MAY 21	CA/CAplus enhanced with additional kind codes for German patents
NEWS 8	MAY 22	CA/CAplus enhanced with IPC reclassification in Japanese patents
NEWS 9	JUN 27	CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10	JUN 29	STN Viewer now available
NEWS 11	JUN 29	STN Express, Version 8.2, now available
NEWS 12	JUL 02	LEMBASE coverage updated
NEWS 13	JUL 02	LMEDLINE coverage updated
NEWS 14	JUL 02	SCISEARCH enhanced with complete author names
NEWS 15	JUL 02	CHEMCATS accession numbers revised
NEWS 16	JUL 02	CA/CAplus enhanced with utility model patents from China
NEWS 17	JUL 16	CAplus enhanced with French and German abstracts
NEWS 18	JUL 18	CA/CAplus patent coverage enhanced
NEWS 19	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 20	JUL 30	USGENE now available on STN
NEWS 21	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 22	AUG 06	BEILSTEIN updated with new compounds
NEWS 23	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 24	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 25	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 26	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 27	AUG 27	USPATOLD now available on STN
NEWS 28	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data

NEWS 29 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 30 SEP 13 FORIS renamed to SOFIS
NEWS 31 SEP 13 INPADOCDB: New SDI frequency MONTHLY available now

NEWS EXPRESS 05 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 05 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 20:28:06 ON 14 SEP 2007

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 20:28:19 ON 14 SEP 2007
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STRUCTURE FILE UPDATES: 13 SEP 2007 HIGHEST RN 947061-18-9
DICTIONARY FILE UPDATES: 13 SEP 2007 HIGHEST RN 947061-18-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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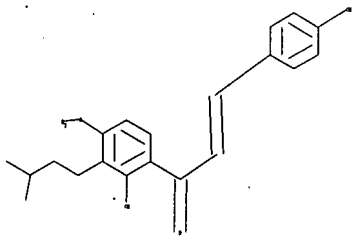
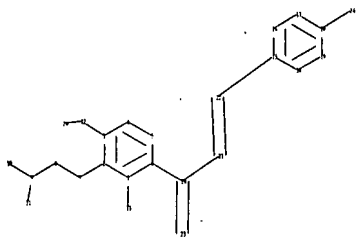
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information

on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10581034.str





chain nodes :
7 8 9 10 11 12 13 20 21 22 23 24 26
ring nodes :
1 2 3 4 5 6 14 15 16 17 18 19
chain bonds :
1-13 2-7 3-12 6-20 7-8 8-9 9-10 9-11 12-26 15-22 18-24 20-21
20-23 21-22
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19
exact/norm bonds :
1-13 3-12 12-26 18-24 20-23
exact bonds :
2-7 6-20 7-8 8-9 9-10 9-11 15-22 20-21 21-22
normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19
isolated ring systems :
containing 1 : 14 :

G1:H,CH3

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom
18:Atom 19:Atom 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS
26:CLASS

L1 STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 20:28:39 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 71 TO ITERATE

100.0% PROCESSED 71 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 915 TO 1925
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 ful
FULL SEARCH INITIATED 20:28:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1745 TO ITERATE

100.0% PROCESSED 1745 ITERATIONS 11 ANSWERS
SEARCH TIME: 00.00.01

L3 11 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 172.10 172.31

FILE 'CAPLUS' ENTERED AT 20:28:53 ON 14 SEP 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 14 Sep 2007 VOL 147 ISS 13
FILE LAST UPDATED: 13 Sep 2007 (20070913/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l3
L4 16 L3

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.82	175.13

FILE 'REGISTRY' ENTERED AT 20:32:17 ON 14 SEP 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 SEP 2007 HIGHEST RN 947061-18-9
DICTIONARY FILE UPDATES: 13 SEP 2007 HIGHEST RN 947061-18-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

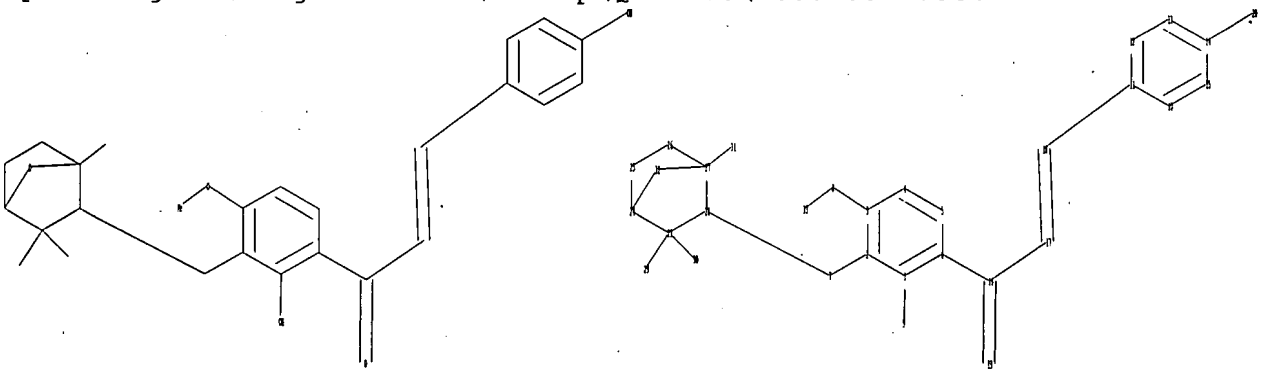
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\105810341.str



chain nodes :
7 8 9 16 17 18 19 20 29 30 31 33
ring nodes :
1 2 3 4 5 6 10 11 12 13 14 15 23 24 25 26 27 28 32
chain bonds :
1-9 2-7 3-8 6-16 7-28 8-33 11-18 14-20 16-17 16-19 17-18 23-29
23-30 27-31
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15
23-24 23-28 24-25 24-32 25-26 26-27 27-28 27-32
exact/norm bonds :
1-9 3-8 14-20 16-19 23-24 23-28 24-25 24-32 25-26 26-27 27-28
27-32
exact bonds :
2-7 6-16 7-28 8-33 11-18 16-17 17-18 23-29 23-30 27-31
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15
isolated ring systems :
containing 1 : 10 :

G1:H,CH3

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS
18:CLASS 19:CLASS 20:CLASS 23:Atom 24:Atom 25:Atom 26:CLASS 27:Atom
28:Atom 29:CLASS 30:CLASS 31:CLA:Atom 33:CLASS

```
L5      STRUCTURE UPLOADED

=> s l5
SAMPLE SEARCH INITIATED 20:32:37 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        0 TO ITERATE

100.0% PROCESSED        0 ITERATIONS                              0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            0 TO        0
PROJECTED ANSWERS:               0 TO        0

L6            0 SEA SSS SAM L5

=> s l5 ful
FULL SEARCH INITIATED 20:32:44 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -        1 TO ITERATE

100.0% PROCESSED        1 ITERATIONS                              1 ANSWERS
SEARCH TIME: 00.00.01

L7            1 SEA SSS FUL L5

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             172.10     347.23

FILE 'CAPLUS' ENTERED AT 20:32:51 ON 14 SEP 2007
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FILE COVERS 1907 - 14 Sep 2007  VOL 147 ISS 13
FILE LAST UPDATED: 13 Sep 2007  (20070913/ED)
```

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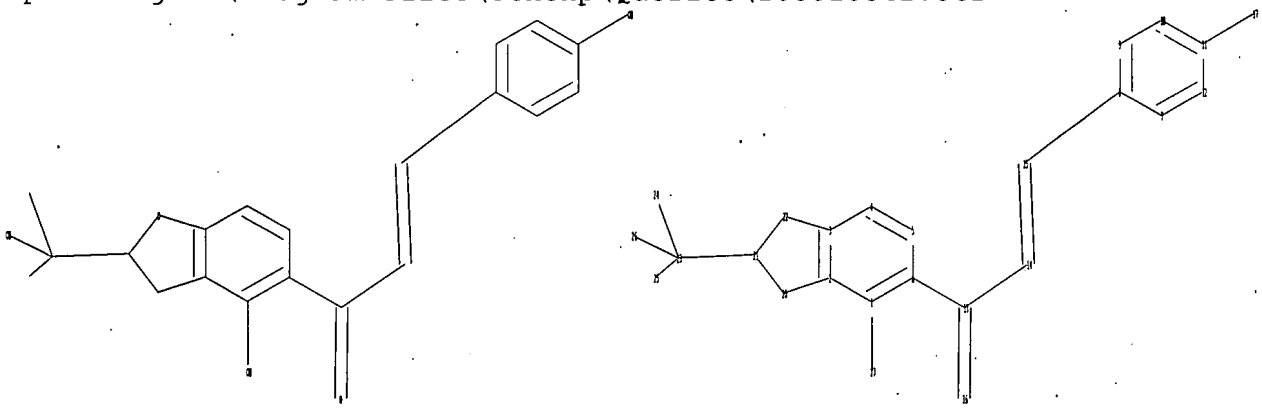
=> s l7
L8 3 L7

=>
Uploading C:\Program Files\Stnexp\Queries\105810342.str



chain nodes :
13 14 15 16 17 23 24 25 26 27
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 20 21 22
chain bonds :
1-27 6-13 8-15 11-17 13-14 13-16 14-15 21-23 23-24 23-25 23-26
ring bonds :
1-2 1-6 2-3 2-20 3-4 3-22 4-5 5-6 7-8 7-12 8-9 9-10 10-11
11-12 20-21 21-22
exact/norm bonds :
1-27 11-17 13-16 23-26
exact bonds :
2-20 3-22 6-13 8-15 13-14 14-15 20-21 21-22 21-23 23-24 23-25
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems :
containing 1 : 7 :

G1:H,CH3

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS
20:Atom 21:Atom 22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS
27:CLASS

L9 STRUCTURE UPLOADED

=> s l9
REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 20:38:21 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

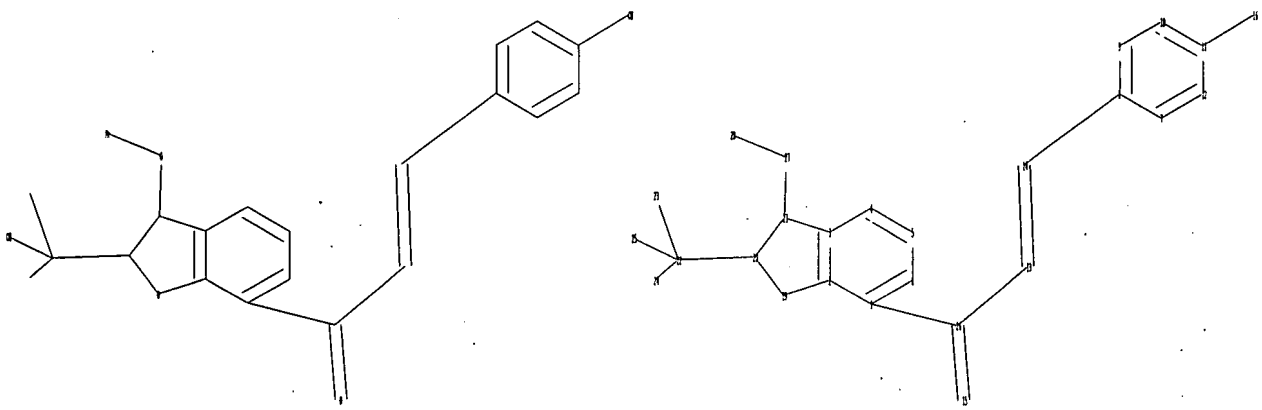
100.0% PROCESSED 1 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L9

L11 0 L10

=>
Uploading C:\Program Files\Stnexp\Queries\105810343.str



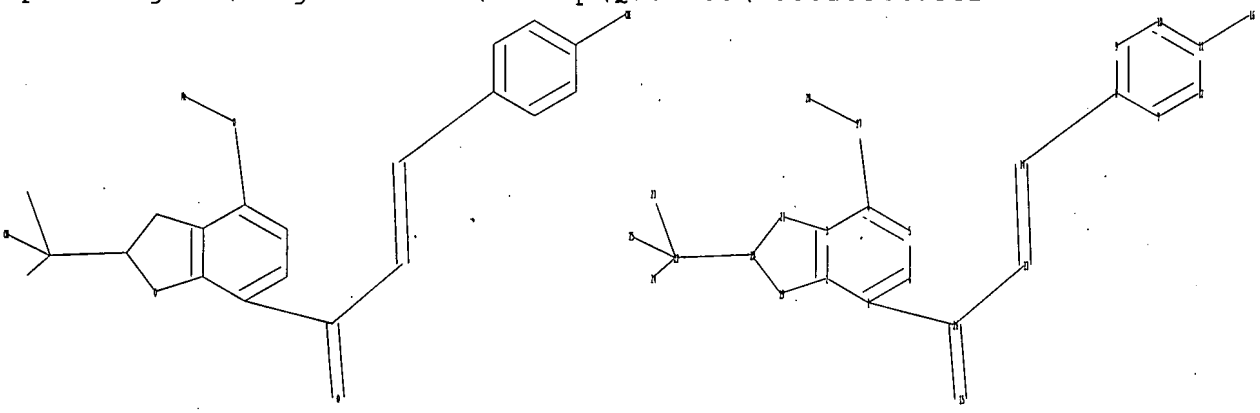
chain nodes :
13 14 15 16 22 23 24 25 26 27 28
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 19 20 21
chain bonds :
1-26 8-14 11-16 13-14 13-26 15-26 20-22 21-27 22-23 22-24 22-25
27-28
ring bonds :
1-2 1-6 2-3 2-19 3-4 3-21 4-5 5-6 7-8 7-12 8-9 9-10 10-11
11-12 19-20 20-21
exact/norm bonds :
11-16 15-26 21-27 22-25
exact bonds :
1-26 2-19 3-21 8-14 13-14 13-26 19-20 20-21 20-22 22-23 22-24
27-28
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
containing 1 : 7 :

G1:H,CH3

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 19:Atom
20:Atom 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS
27:CLASS 28:CLASS

L12 STRUCTURE UPLOADED

=>
Uploading C:\Program Files\Stnexp\Queries\105810344.str



chain nodes :
13 14 15 16 22 23 24 25 26 27 28
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 19 20 21
chain bonds :
1-26 4-27 8-14 11-16 13-14 13-26 15-26 20-22 22-23 22-24 22-25
27-28
ring bonds :
1-2 1-6 2-3 2-19 3-4 3-21 4-5 5-6 7-8 7-12 8-9 9-10 10-11
11-12 19-20 20-21
exact/norm bonds :
4-27 11-16 15-26 22-25
exact bonds :
1-26 2-19 3-21 8-14 13-14 13-26 19-20 20-21 20-22 22-23 22-24
27-28
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :

containing 1 : 7 :

G1:H,CH3

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 19:Atom
20:Atom 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS
27:CLASS 28:CLASS

L13 STRUCTURE UPLOADED

=> s l13
REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 20:42:34 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2 TO 124
PROJECTED ANSWERS: 0 TO 0

L14 0 SEA SSS SAM L13

L15 0 L14

=> dup rem l4 l8
PROCESSING COMPLETED FOR L4
PROCESSING COMPLETED FOR L8
L16 17 DUP REM L4 L8 (2 DUPLICATES REMOVED)

=> d l16 ibib abs hitstr hitind 1-17

L16 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:641256 CAPLUS
DOCUMENT NUMBER: 147:64520

TITLE: Protein kinase modulation and inflammatory response inhibition by hops and Acacia products
INVENTOR(S): Tripp, Matthew L.; Babish, John G.; Bland, Jeffrey; Hall, Amy Jennae; Konda, Veera; Pacioretty, Linda; Desai, Anu
PATENT ASSIGNEE(S): Metaproteomics, LLC, USA
SOURCE: PCT Int. Appl., 164pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

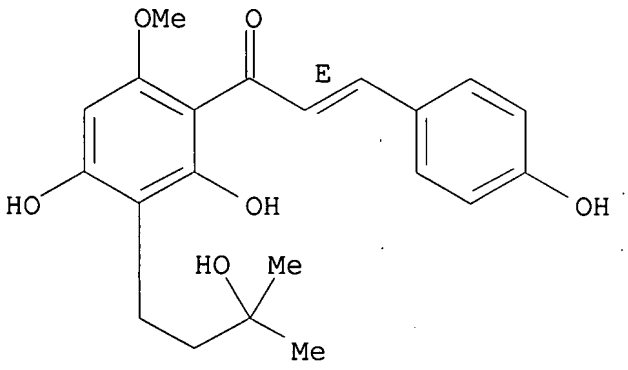
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007067812	A2	20070614	WO 2006-US47196	20061211
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 2007154576	A1	20070705	US 2006-636867	20061211
PRIORITY APPLN. INFO.:			US 2005-748931P P	20051209

AB Botanical compds. to modulate kinase activity are disclosed. The compds. and methods disclosed also inhibit expression of COX-2, inhibit synthesis of prostaglandins selectively in target cells, and inhibit inflammatory response selectively. The compns. contain at least one fraction isolated or derived from hops or Acacia.

IT 688359-98-0, Xanthohumol H 832078-79-2, Xanthohumol G
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protein kinase modulation and inflammatory response inhibition by hops and Acacia products)

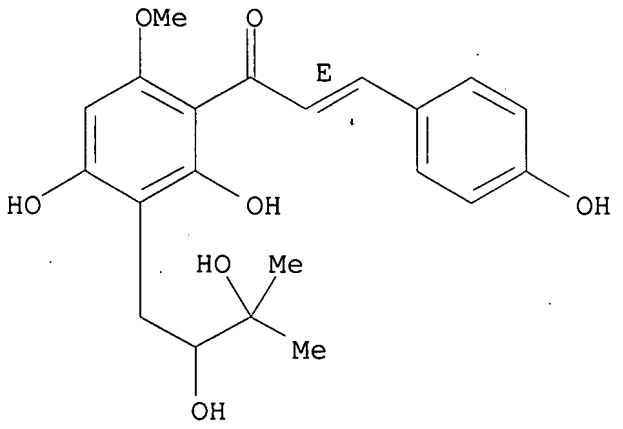
RN 688359-98-0 CAPLUS
CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(3-hydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



RN 832078-79-2 CAPLUS
CN 2-Propen-1-one, 1-[3-(2,3-dihydroxy-3-methylbutyl)-2,4-dihydroxy-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



CC 1-7 (Pharmacology)
Section cross-reference(s): 63
IT 50-81-7, Vitamin C, biological studies 94-41-7, Chalcone 94-41-7D, Chalcone, derivs. 123-08-0, 4-Hydroxybenzaldehyde 127-40-2, Lutein 144-68-3, Zeaxanthin 458-37-7, Curcumin 467-72-1, trans-Isohumulone 468-27-9, Colupulone 468-28-0, Lupulone 469-03-4, Posthumulone 474-58-8 475-36-5, Adhumulone 981-03-3, Humulinone 1406-18-4, Vitamin E 1534-03-8, cis-Isohumulone 6754-58-1, Xanthohumol 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7782-49-2, Selenium, biological studies 25269-20-9, Isocohumulone 25422-83-7, Isoadhumulone 25522-96-7, Isohumulone 26054-22-8, cis-TetrahydroIsohumulone 28374-71-2, Adlupulone 28815-20-5, Tetrahydroisohumulone 29788-67-8, trans-TetrahydroIsohumulone 34421-27-7, Tetrahydroisocohumulone 38602-23-2,
CoHumulinone 52755-22-3, Hexahydrocolupulone 53846-50-7, 8-Prenylnaringenin 58501-77-2, trans-Isocohumulone 59122-94-0,

Prehumulone 65761-25-3, Prelupulone 68107-76-6, trans-Isoadhumulone 68127-23-1, cis-Isocohumulone 68236-11-3, 6,8-Diprenylnaringenin 68236-13-5, 6-Prenylnaringenin 70872-29-6, Isoxanthohumol 96614-01-6, cis-Isoadhumulone 115063-39-3, DesmethylXanthohumol 121250-47-3, Conjugatedlinoleic acid 123316-63-2, 4'-O-MethylXanthohumol 142628-20-4, Cohumulone 189299-03-4, 3'-Geranylchalconaringenin 189299-04-5, 5'-Prenylxanthohumol 189299-05-6, Xanthohumol C 189308-10-9, Xanthohumol B 250603-94-2, Isodehydrocycloxanthohumol hydrate 265659-35-6, Xanthogalenol 274266-56-7 274675-25-1, Xanthohumol D 274675-26-2, Xanthohumol E 685110-34-3, Hexahydroisohumulone 685110-35-4, Dihydroisohumulone 685110-36-5, Tetrahydroadhumulone 685110-37-6, Hexahydroisocohumulone 685110-38-7, Hexahydroadhumulone 688359-98-0, Xanthohumol H 688360-06-7, Xanthohumol I 790664-64-1, Dihydroisocohumulone 831227-05-5, Desmethylxanthohumol B 831227-06-6, Desmethylxanthohumol J 832078-79-2, Xanthohumol G
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protein kinase modulation and inflammatory response inhibition by hops and Acacia products)

L16 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:489728 CAPLUS
DOCUMENT NUMBER: 144:481031
TITLE: Carcinogenesis inhibitors containing natural chalcones, coumarins, flavanones, and/or diacetylene derivative
INVENTOR(S): Akihisa, Toshihiro; Tokuda, Harukuni; Ukiya, Motohiko; Hasegawa, Daisuke
PATENT ASSIGNEE(S): Nihon University, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006131594	A	20060525	JP 2004-325369	20041109
PRIORITY APPLN. INFO.:			JP 2004-325369	20041109

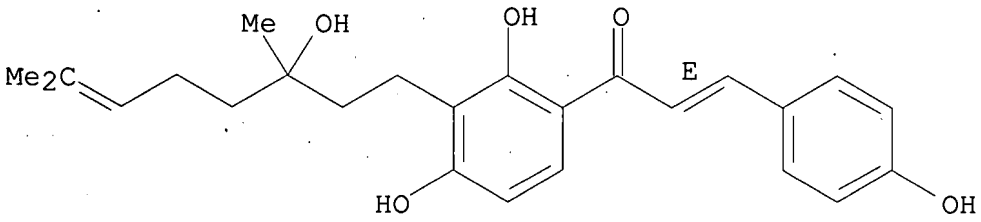
AB Title inhibitors contain dorsmanin A, xanthoangelol I, J, xanthotoxin, isopimpinellin, osthenol, isobavachin, mundulea flavanone B, 8-geranylnaringenin, and/or (11S,16R)-dihydroxyoctadeca-9Z,17-diene-12,14-diyn-1-yl acetate. They may be added to foods, beverages, and feeds.

Thus, xanthoangelol I and J completely inhibited TPA-induced expression of Epstein-Barr virus early antigen in Raji cells with their survival rate 70%, vs. 60%, for curcumin.

IT 878277-38-4P, Xanthoangelol J
RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(carcinogenesis inhibitors containing Angelica keiskei exudate constituents with low toxicity)

RN 878277-38-4 CAPLUS
CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(3-hydroxy-3,7-dimethyl-6-octenyl)phenyl]-3-(4-hydroxyphenyl)-, (2E)-(+)- (9CI) (CA INDEX NAME)

Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



CC 1-6 (Pharmacology)
Section cross-reference(s): 11, 17, 63

IT 298-81-7P, Xanthotoxin 482-27-9P, Isopimpinellin 484-14-0P, Osthenol 31524-62-6P, Isobavachin 87893-18-3P, 8-Geranylnaringenin 162229-27-8P, Dorsmanin A 201805-81-4P, Mundulea flavanone B 213905-35-2P, (11S,16R)-Dihydroxyoctadeca-9Z,17-diene-12,14-diyn-1-yl acetate 878277-37-3P, Xanthoangelol I 878277-38-4P, Xanthoangelol J
RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(carcinogenesis inhibitors containing Angelica keiskei exudate constituents with low toxicity)

L16 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:35389 CAPLUS
DOCUMENT NUMBER: 144:270561
TITLE: Chalcones and Other Compounds from the Exudates of

Angelica keiskei and Their Cancer Chemopreventive Effects

AUTHOR(S): Akihisa, Toshihiro; Tokuda, Harukuni; Hasegawa, Daisuke; Ukiya, Motohiko; Kimura, Yumiko; Enjo, Fumio; Suzuki, Takashi; Nishino, Hoyoku

CORPORATE SOURCE: College of Science and Technology, Nihon University, Tokyo, 101-8308, Japan

SOURCE: Journal of Natural Products (2006), 69(1), 38-42
CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society-American Society of Pharmacognosy

DOCUMENT TYPE: Journal

LANGUAGE: English

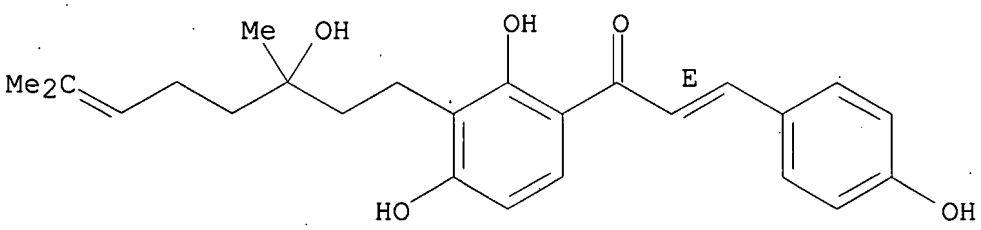
AB Three new chalcones, xanthoangelol I (1), xanthoangelol J (2), and deoxydihydroxanthoangelol H (3), were isolated from an Et acetate-soluble fraction of exudates of the stems of Angelica keiskei, and their structures were established on the basis of spectroscopic methods. Nine aromatic compds. of known structure, 4-12, and a diacetylene, 13, were also isolated and identified from this same fraction. On evaluation of these compds. for their inhibitory effects on the induction of Epstein-Barr virus early antigen (EBV-EA) by 12-O-tetradecanoylphorbol-13-acetate (TPA) in Raji cells, 1, 2, 4, and 9-12 showed potent inhibitory effects on EBV-EA induction. In addition, upon evaluation of the inhibitory effects against activation of (±)-(E)-methyl-2[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexemide (NOR 1), a nitrogen oxide (NO) donor, six compds., namely, 1, 2, 4, 9, 11, and 12, exhibited potent inhibitory effects. Further, isobavachalcone (4) exhibited inhibitory effects on skin tumor promotion in an in vivo two-stage mouse skin carcinogenesis test using 7,12-dimethylbenz[a]anthracene (DMBA) as an initiator and TPA as a promoter.

IT 878277-38-4P, Xanthoangelol J
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(isolation and characterization of chalcones and other compds. from the exudates of Angelica keiskei and their cancer chemopreventive effects)

RN 878277-38-4 CAPLUS

CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(3-hydroxy-3,7-dimethyl-6-octenyl)phenyl]-3-(4-hydroxyphenyl)-, (2E)-(+)- (9CI) (CA INDEX NAME)

Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 1, 26
IT 877875-97-3P, Deoxydihydroxanthoangelol H 878277-37-3P, Xanthoangelol I
878277-38-4P, Xanthoangelol J
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
PRP (Properties); PUR (Purification or recovery); BIOL (Biological study);
PREP (Preparation)
(isolation and characterization of chalcones and other compds. from the
exudates of Angelica keiskei and their cancer chemopreventive effects)
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2005:523399 CAPLUS
DOCUMENT NUMBER: 143:59727
TITLE: Extract of chalcone derivatives as aldose reductase inhibitors
INVENTOR(S): Ohnogi, Hiromu; Sugiyama, Katsumi; Enoki, Tatsuji; Kobayashi, Eiji; Sagawa, Hiroaki; Kato, Ikunoshin
PATENT ASSIGNEE(S): Takara Bio Inc., Japan
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054170	A1	20050616	WO 2004-JP17887	20041201
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

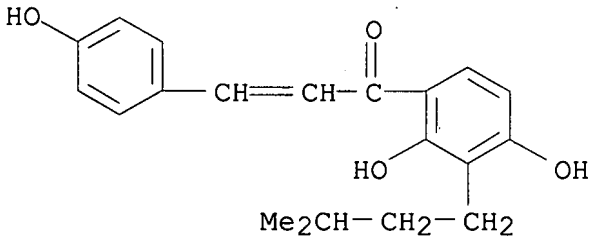
EP 1702912	A1	20060920	EP 2004-819873		20041201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS					
CN 1890205	A	20070103	CN 2004-80036040		20041201
US 2007112066	A1	20070517	US 2006-581034		20060530
PRIORITY APPLN. INFO.:			JP 2003-408215	A	20031205
			WO 2004-JP17887	W	20041201

AB It is intended to provide novel chalcone compds. having carbon monoxide inhibitory effect or aldose reductase inhibitory effect, its derivs. or salts thereof. Eight chalcone derivs. were obtained from the extract of angelica. One chalcone derivative was synthesized. These compds. showed good inhibitory effect against aldose reductase and NO generation.

IT 853945-93-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; extract of chalcone derivs. as aldose reductase inhibitors)

RN 853945-93-4 CAPLUS

CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(3-methylbutyl)phenyl]-3-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



IC ICM C07C049-835
ICS C07C049-84; C07C409-08; C07D307-80; C07D493-08; A61K031-343; A61K031-12; A61K031-201; A61K031-34; A61P003-10; A61P009-10; A61P013-12; A61P019-02; A61P019-06; A61P019-08; A61P025-02; A61P027-12; A61P029-00; A61P031-00; A61P035-00

CC 26-4 (Biomolecules and Their Synthetic Analogs)

Section cross-reference(s): 1, 17
IT 791112-91-9P 791112-93-1P 791112-94-2P 791112-95-3P 791112-96-4P
791112-97-5P 791632-40-1P 853945-92-3P 853945-93-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; extract of chalcone derivs. as aldose reductase inhibitors)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:823550 CAPLUS
DOCUMENT NUMBER: 143:199938
TITLE: Remedy containing 3-hydroxy-3-methylglutaryl-CoA reductase inhibitor and/or cell foaming inhibitor
INVENTOR(S): Enoki, Tatsuji; Kudo, Yoko; Sugiyama, Katsumi; Ohnogi, Hiromu; Sagawa, Hiroaki; Kato, Ikunoshin
PATENT ASSIGNEE(S): Takara Bio Inc., Japan
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005074906	A1	20050818	WO 2005-JP1655	20050204

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2004-31173 A 20040206

OTHER SOURCE(S): MARPAT 143:199938
AB It is intended to provide a drug, a food, a drink or a feed for treating or preventing diseases, wherein an effect of inhibiting 3-hydroxy-3-methylglutaryl-CoA reductase and/or an effect against cell foaming are needed for the prevention or treatment, characterized by

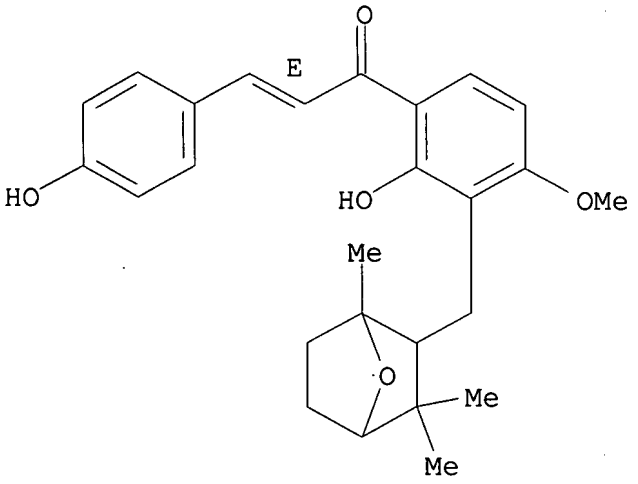
containing, as the active ingredient, at least one compound selected from the group consisting of chalcone compds., flavanone compds., 3',4'-dihydroseseline compds., derivs. thereof and salts thereof. The above-described drug, food, drink or feed is useful in treating or preventing, for example, hyperlipemia, arteriosclerosis and various diseases caused mainly thereby. For example, xanthoangelol was isolated from Angelica Keiskei root extract, and examined for its HMG-CoA reductase inhibitory effect in vitro.

IT 791632-40-1P
RL: FFD (Food or feed use); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(chalcone compds., flavanone compds., and dihydroseseline compds. as 3-hydroxy-3-methylglutaryl-CoA reductase inhibitors and/or cell foaming inhibitors)

RN 791632-40-1 CAPLUS

CN 2-Propen-1-one, 1-[2-hydroxy-4-methoxy-3-[(1,3,3-trimethyl-7-oxabicyclo[2.2.1]hept-2-yl)methyl]phenyl]-3-(4-hydroxyphenyl)-, (2E)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



IC ICM A61K031-12
ICS A23K001-16; A23L001-30; A23L002-52; A61K031-34; A61K031-343; A61K031-352; A61K031-353; A61P003-06; A61P009-10; A61P043-00; C12N009-99; C07D307-80; C07D311-32; C07D311-80; C07D493-08

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 17, 18

IT 6754-58-1P, Xanthohumol 20784-50-3P, Isobavachalcone 27800-79-9P 29049-07-8P 31524-62-6P, Isobavachin 62949-76-2P, Xanthoangelol

160036-29-3P, 4'-O-Geranylnaringenin 162382-66-3P, Prostratol F
265652-71-9P, Xanthoangelol F 265652-88-8P, Xanthoangelol G
265652-89-9P, Xanthoangelol H 299929-45-6P 677726-10-2P
677746-19-9P
791112-91-9P 791112-92-0P 791112-93-1P 791112-94-2P
791112-95-3P
791112-96-4P 791113-21-8P 791632-40-1P 862013-04-5P
RL: FFD (Food or feed use); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(chalcone compds., flavanone compds., and dihydroseseline compds. as 3-hydroxy-3-methylglutaryl-CoA reductase inhibitors and/or cell foaming
inhibitors)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:604276 CAPLUS
DOCUMENT NUMBER: 143:259686
TITLE: Xanthohumol Isolated from Humulus lupulus Inhibits Menadione-Induced DNA Damage through Induction of Quinone Reductase
AUTHOR(S): Dietz, Birgit M.; Kang, Young-Hwa; Liu, Guowen; Eggler, Aimee L.; Yao, Ping; Chadwick, Lucas R.; Pauli, Guido F.; Farnsworth, Norman R.; Mesecar, Andrew D.; Van Breemen, Richard B.; Bolton, Judy L.
CORPORATE SOURCE: College of Pharmacy, Department of Medicinal Chemistry
and Pharmacognosy and UIC/NIH Center for Botanical Dietary Supplements Research, University of Illinois
at Chicago, Chicago, IL, 60612-7231, USA
SOURCE: Chemical Research in Toxicology (2005), 18(8), 1296-1305
CODEN: CRTOEC; ISSN: 0893-228X
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The female parts of hops (Humulus lupulus L.) show estrogenic effects as
well as cancer chemopreventive potential. We analyzed the chemopreventive
mechanism of hops by studying its antioxidative activities and its effect
on the detoxification of a potentially toxic quinone (menadione). The
detoxification enzyme quinone reductase [(NAD(P)H):quinone oxidoreductase,
QR] protects against quinone-induced toxicity and has been used as a

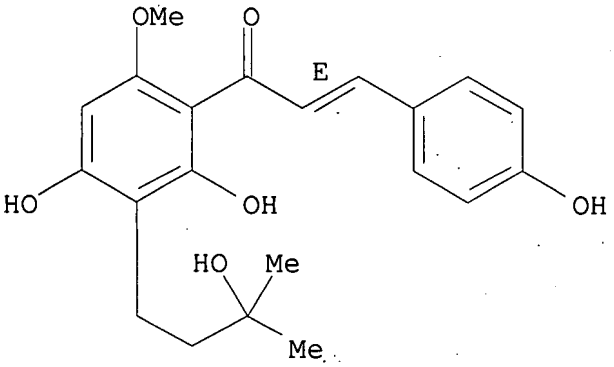
marker in cancer chemoprevention studies. Although the hop extract was only a weak quencher of free radicals formed from 1,1-diphenyl-2-picrylhydrazyl, it demonstrated strong QR induction in Hepa 1c1c7 cells. In addition, compds. isolated from hops including xanthohumol (XH) and 8-prenyl-naringenin were tested for QR induction. Among these, XH was the most effective at inducing QR with a concentration required to double the specific activity of QR (CD value) of 1.7±0.7 μM. In addition, pretreatment of Hepa1c1c7 cells with XH significantly inhibited menadione-induced DNA single-strand breaks. The QR inhibitor dicumarol reversed the protective effect of XH against menadione-induced DNA damage. Because the expression of QR and other detoxifying enzymes is known to be upregulated by binding of the transcription factor Nrf2 to the antioxidant response element (ARE), the reporter activity mediated by ARE in HepG2-ARE-C8 cells was investigated after incubation with XH for 24 h. Under these conditions, XH increased ARE reporter activity in a dose-dependent manner. One mechanism by which XH might induce QR could be through interaction with Keap1, which sequesters Nrf2 in the cytoplasm, so that it cannot activate the ARE. Using LC-MS-MS, we demonstrated that XH alkylates human Keap1 protein, most likely on a subset of the 27 cysteines of Keap1. This suggests that XH induces QR by covalently modifying the Keap1 protein. Therefore, XH and hops dietary supplements might function as chemopreventive agents, through induction of detoxification enzymes such as QR.

IT 688359-98-0, Xanthohumol H 832078-79-2, Xanthohumol G
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(xanthohumol from Humulus lupulus inhibits menadione-induced DNA damage through induction of quinone reductase)

RN 688359-98-0 CAPLUS

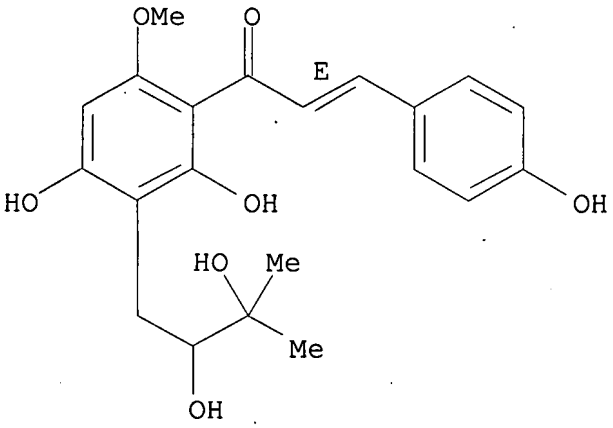
CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(3-hydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



RN 832078-79-2 CAPLUS
CN 2-Propen-1-one, 1-[3-(2,3-dihydroxy-3-methylbutyl)-2,4-dihydroxy-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



CC 1-6 (Pharmacology)
Section cross-reference(s): 11
IT 68236-11-3, 6,8-Diprenylnaringenin 68236-13-5, 6-Prenylnaringenin 70872-29-6, Isoxanthohumol 189299-04-5 189299-05-6, Xanthohumol C 189308-10-9, Xanthohumol B 274675-25-1, Xanthohumol D 688359-98-0, Xanthohumol H 688360-06-7, Xanthohumol I 688360-14-7 831227-04-4 831227-05-5, Desmethylxanthohumol B 831227-06-6, Desmethylxanthohumol J 832078-79-2, Xanthohumol G 863718-47-2
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
(Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(xanthohumol from Humulus lupulus inhibits menadione-induced DNA damage
through induction of quinone reductase)
REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS

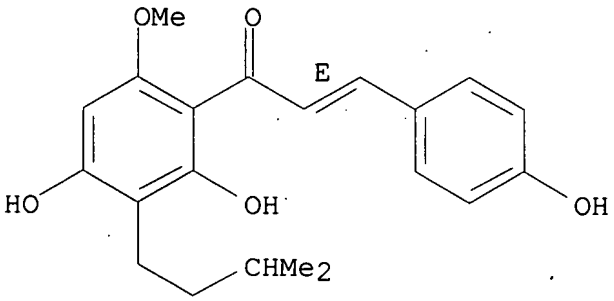
RECORD. ALL CITATIONS AVAILABLE IN THE RE-
FORMAT

L16 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:602816 CAPLUS
DOCUMENT NUMBER: 143:282488
TITLE: In vitro antiplasmodial activity of prenylated chalcone derivatives of hops (Humulus lupulus) and their interaction with hemin
AUTHOR(S): Froelich, Sonja; Schubert, Carola; Bienzle, Ulrich; Jenett-Siems, Kristina
CORPORATE SOURCE: Institut fuer Pharmazie (Pharmazeutische Biologie), Freie Universitaet Berlin, Berlin, D-14195, Germany
SOURCE: Journal of Antimicrobial Chemotherapy (2005), 55(6), 883-887
CODEN: JACHDX; ISSN: 0305-7453
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB There is an urgent need to discover new antimalarials, due to the spread of chloroquine resistance and the limited number of available drugs. Chalcones are one of the classes of natural products that are known to possess antiplasmodial properties. Therefore, the in vitro antiplasmodial activity of the main hop chalcone xanthohumol and seven derivs. was evaluated. In addition, the influence of the compds. on glutathione (GSH)-dependent hemin degradation was analyzed to determine its contribution to the antimalarial effect of chalcones. In vitro antiplasmodial activity was evaluated against the chloroquine-sensitive strain poW and the multi-resistant clone Dd2 using a [3H]hypoxanthine-incorporation assay. Inhibition of GSH-dependent hemin degradation was analyzed by a multi-well plate assay at 11 μM. Of the eight compds. tested, four possessed activity with IC50 values < 25 μM against at least one of the two strains of Plasmodium falciparum. The main hop chalcone, xanthohumol, was most active with IC50 values of 8.2±0.3 (poW) and 24.0±0.8 μM (Dd2). Three of these compds. were addnl. active in the hemin-degradation assay. The results demonstrate for the first time the ability of chalcone derivs. to interfere with the hemin-degradation process of P. falciparum. This effect might contribute to their antiplasmodial activity. Nevertheless, as one compound showed inhibition of P. falciparum without being able to interact with GSH-dependent hemin degradation, other modes of action must add to the observed antiparasitic activity of hop chalcones.

IT 864465-61-2
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antiplasmodial activity of prenylated chalcone derivs. of hops (Humulus lupulus) and their influence on glutathione-dependent hemin degradation)
RN 864465-61-2 CAPLUS
CN 2-Propen-1-one,
1-[2,4-dihydroxy-6-methoxy-3-(3-methylbutyl)phenyl]-3-(4-hydroxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 11
IT 70-18-8, Glutathione, biological studies 94-41-7D, Chalcone, prenylated
derivs. 6754-58-1, Xanthohumol 16009-13-5, Hemin 68236-13-5 115063-39-3 115063-40-6 250603-94-2 688360-14-7 864465-61-2 864465-62-3
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antiplasmodial activity of prenylated chalcone derivs. of hops (Humulus lupulus) and their influence on glutathione-dependent hemin degradation)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L16 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:781478 CAPLUS
DOCUMENT NUMBER: 144:167259
TITLE: Brosimacutins J-M, four new flavonoids from Brosimum
acutifolium and their cytotoxic activity
AUTHOR(S): Takashima, Junko; Komiyama, Kanki; Ishiyama, Haruaki;
Kobayashi, Jun'ichi; Ohsaki, Ayumi
CORPORATE SOURCE: Research & Development Division, Mitsubishi Pharma Corporation, Yokohama, Japan
SOURCE: Planta Medica (2005), 71(7), 654-658

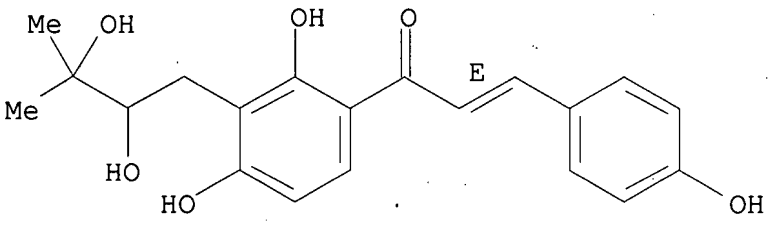
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Four new flavonoids, brosimacutins J-M (I-IV), were isolated from the bark of Brosimum acutifolium Huber together with a known flavan, brosimine A (5). The structures of compds. I-IV were elucidated by spectroscopic means. 27 Constituents of this plant including compds. 1-5 were evaluated for their cytotoxic activity against murine leukemia P388 cells. Although no compds. tested had any reversal effect on vincristine resistance, brocimacutins J-M were cytotoxic to vincristine-resistant P388 cells (IC50 4.4-19 μg/mL).

IT 874205-59-1P, Brosimacutin M
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(brosimacutins J-M, four new flavonoids from Brosimum acutifolium and their cytotoxic activity)
RN 874205-59-1 CAPLUS
CN 2-Propen-1-one, 1-[3-(2,3-dihydroxy-3-methylbutyl)-2,4-dihydroxyphenyl]-3-(4-hydroxyphenyl)-, (2E)-(-)- (9CI) (CA INDEX NAME)

Rotation (-).
Double bond geometry as shown.
Currently available stereo shown.

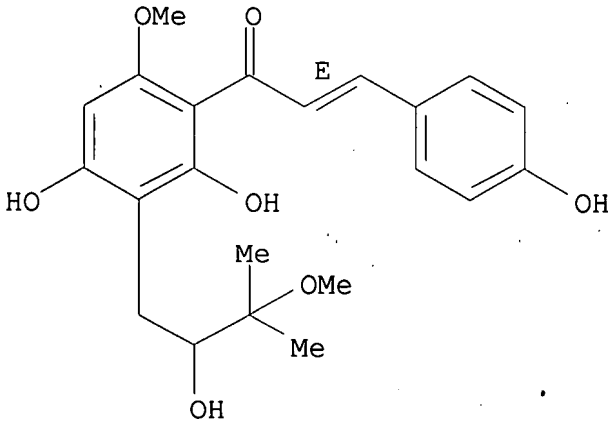


CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 26
IT 874204-62-3P, Brosimacutin J 874205-55-7P, Brosimacutin K
874205-58-0P, Brosimacutin L 874205-59-1P, Brosimacutin M

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(brosimacutins J-M, four new flavonoids from Brosimum acutifolium and their cytotoxic activity)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:3740 CAPLUS
DOCUMENT NUMBER: 142:215204
TITLE: Prenylflavonoids and Phloroglucinol Derivatives from Hops (Humulus lupulus)
AUTHOR(S): Zhao, Feng; Watanabe, Yuki; Nozawa, Hajime; Daikonnya, Akihiro; Kondo, Keiji; Kitanaka, Susumu
CORPORATE SOURCE: Central Laboratories for Key Technology, Kirin Brewery Co., Ltd., Kanagawa, 236-0004, Japan
SOURCE: Journal of Natural Products (2005), 68(1), 43-49
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The Et acetate soluble fraction of hops (Humulus lupulus) showed potent inhibitory activity on the production of nitric oxide (NO) induced by a combination of LPS and IFN-γ. Four known prenylflavonoids and a new prenylflavonoid, hulupinic acid, lupulone , and its six new derivs. were isolated from the active fraction. The structures were determined on the basis of physiochem. properties and spectroscopic anal. Their inhibitory activities on the production of NO in macrophage RAW 264.7 cells were examined
IT 842121-72-6P
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(prenylflavonoids and phloroglucinol derivs. from Humulus lupulus)
RN 842121-72-6 CAPLUS
CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(2-hydroxy-3-methoxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 7, 26
IT 29366-64-1P, Lupulone E 613683-50-4P, Lupulone C 613683-51-5P, Lupulone D 842121-72-6P 842121-73-7P, Lupulone A 842121-74-8P, Lupulone B 842121-75-9P, Lupulone F
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(prenylflavonoids and phloroglucinol derivs. from Humulus lupulus)
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L16 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2004:965043 CAPLUS
DOCUMENT NUMBER: 141:415986
TITLE: Therapeutic agent for insulin-related disease
INVENTOR(S): Enoki, Tatsuji; Kobayashi, Eiji; Ogawa, Kinuko; Kudo,
Yoko; Tanabe, Masashige; Sugiyama, Katsumi; Ohnogi, Hiromu; Sagawa, Hiroaki; Kato, Ikunoshin
PATENT ASSIGNEE(S): Takara Bio Inc., Japan
SOURCE: PCT Int. Appl., 289 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096198	A1	20041111	WO 2004-JP6282	20040430

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1623704	A1	20060208	EP 2004-730641 20040430
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
CN 1816328	A	20060809	CN 2004-80018286 20040430
US 2007092551	A1	20070426	US 2007-555017 20070103
JP 2007131637	A	20070531	JP 2007-21753 20070131
JP 2007186515	A	20070726	JP 2007-21740 20070131
PRIORITY APPLN. INFO.:			JP 2003-127517 A 20030502
			JP 2003-140821 A 20030519
			JP 2003-177280 A 20030620
			JP 2003-202118 A 20030725
			JP 2003-408213 A 20031205
			JP 2004-90656 A 20040325
			JP 2005-505944 A3 20040430
			WO 2004-JP6282 W 20040430

OTHER SOURCE(S): MARPAT 141:415986

AB Disclosed is a preventive or therapeutic agent for diseases accompanied by insulin level or insulin response disorder, characterized in that at least one compound selected from the group consisting of chalcone compds., acetophenone compds., coumarin compds., phthalide compds., derivs. of these and pharmacol. acceptable salts thereof is contained as an active ingredient. There are further provided an insulin-like agent; a food, beverage or feed; a promoter of glucose introjection in cells; and an agent capable of inducing differentiation to lipocytes. The agents are suitable for use in pharmaceuticals, foods, and/or feeds. For example, xanthoangelol was isolated from Angelica keiskei root, and in vitro tested for its effect on adipocyte differentiation induction.

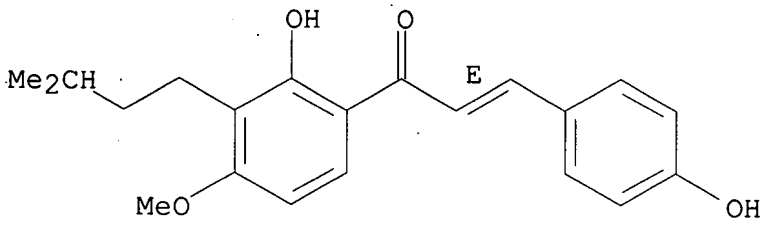
IT 791113-01-4P
RL: FFD (Food or feed use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(therapeutic agents for insulin-related disease containing chalcone

compds., acetophenone compds., coumarin compds., and/or phthalide compds.,)

RN 791113-01-4 CAPLUS

CN 2-Propen-1-one, 1-[2-hydroxy-4-methoxy-3-(3-methylbutyl)phenyl]-3-(4-hydroxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IC ICM A61K031-121
ICS A61K031-222; A61K031-343; A61K031-341; A61K031-365; A61K031-351; A61K031-381; A61K031-366; A61K031-352; A61P043-00; A61P003-10; A61P003-08; A61P005-50; C07D493-08; C07D309-12; C07D311-32; C07C049-84; C07C049-835; C07C069-18; C07C069-157

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 17, 18

IT 6272-43-1P, 3,4,2'-Trihydroxychalcone 20180-87-4P, 2'-Hydroxy-3'-geranyl-4'-methoxyacetophenone 28437-37-8P 28448-85-3P, Bavachalcone 31165-67-0P, 2'-Benzyloxyacetophenone 37761-53-8P 63529-06-6P 65786-15-4P 66549-80-2P 66549-83-5P 95832-45-4P 118062-82-1P 126909-50-0P 162382-66-3P, Prostratol F 208659-72-7P 265652-88-8P, Xanthoangelol G 352275-68-4P 352275-69-5P 791112-98-6P 791113-00-3P 791113-01-4P 791113-02-5P 791113-03-6P 791113-04-7P 791113-06-9P 791113-07-0P 791113-08-1P 791113-09-2P 791113-10-5P 791113-11-6P 791113-12-7P 791113-13-8P 791113-16-1P 791113-17-2P 791113-18-3P 791113-19-4P 791113-20-7P 791113-21-8P 791113-24-1P 791113-25-2P 791113-29-6P 791113-31-0P 791113-32-1P 791113-33-2P 791113-34-3P 791113-35-4P
RL: FFD (Food or feed use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(therapeutic agents for insulin-related disease containing chalcone compds., acetophenone compds., coumarin compds., and/or phthalide compds.,)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

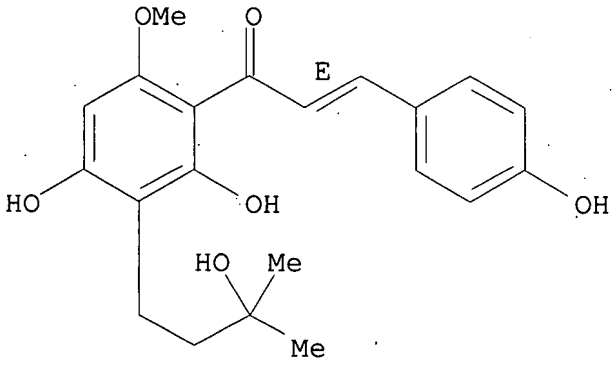
L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1068127 CAPLUS
DOCUMENT NUMBER: 142:173331
TITLE: Estrogens and Congeners from Spent Hops (Humulus lupulus)
AUTHOR(S): Chadwick, Lucas R.; Nikolic, Dejan; Burdette, Joanna E.; Overk, Cassia R.; Bolton, Judy L.; van Breemen, Richard B.; Froehlich, Roland; Fong, Harry H. S.; Farnsworth, Norman R.; Pauli, Guido F.
CORPORATE SOURCE: UIC/NIH Center for Botanical Dietary Supplements Research, Department of Medicinal Chemistry and Pharmacognosy, College of Pharmacy, University of Illinois at Chicago, Chicago, IL, 60612, USA
SOURCE: Journal of Natural Products (2004), 67(12), 2024-2032
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Estrogenicity-directed fractionation of a methanol extract of the strobiles of Humulus lupulus that had been extracted previously with supercrit. CO2, known as "spent hops", led to the isolation and identification of 22 compds. including 12 prenylated chalcones (1-8, 10-13), five prenylflavanones (14-17), 4-hydroxybenzaldehyde (18), sitosterol-3-O-β-glucopyranoside (19), humulinone (20), and cohumulinone (21). In addition, the prenylated chalcone xanthohumol C (9a) was obtained as a 6:1 mixture along with its 1'',2''-dihydro derivative (9b). Three new chalcones (4, 11, 12) and four previously unreported constituents of hops (5, 6, 9b, 13) are reported. The structures of the new compds. were determined through a combination of spectrometric techniques including 1D and 2D NMR, HRESIMS, and ESIMS-MS. Full 1H NMR spin system analyses were performed to characterize the higher-order glucopyranosyl, prenyl, and chalcone B-ring spectra of the isolates. The principle estrogen 8-prenylnaringenin (15) from hops is an artifact formed along with its positional isomer 6-prenylnaringenin (16) through the spontaneous isomerization of the pro-estrogenic chalcone DMX (7).

IT 688359-98-0P, Xanthohumol H 832078-79-2P, Xanthohumol G
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(estrogens and congeners from Humulus lupulus)

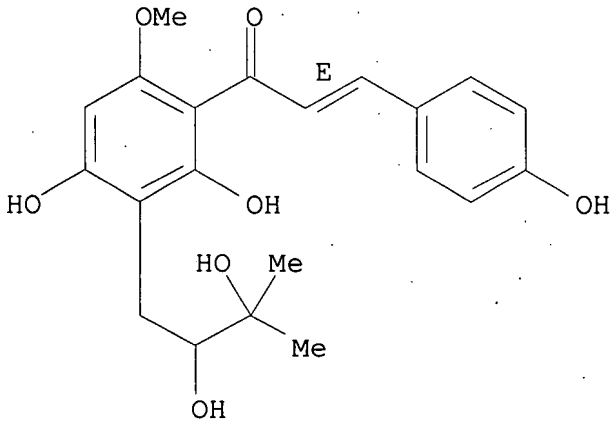
RN 688359-98-0 CAPLUS
CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(3-hydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



RN 832078-79-2 CAPLUS
CN 2-Propen-1-one, 1-[3-(2,3-dihydroxy-3-methylbutyl)-2,4-dihydroxy-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



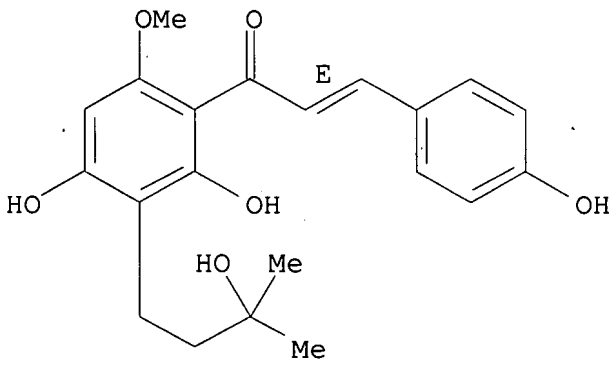
CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 26
IT 250603-94-2P 688359-98-0P, Xanthohumol H 688360-06-7P, Xanthohumol I 831227-04-4P 831227-05-5P, Desmethylxanthohumol B 831227-06-6P, Desmethylxanthohumol J 832078-79-2P, Xanthohumol G
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(estrogens and congeners from Humulus lupulus)
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:173234 CAPLUS
DOCUMENT NUMBER: 140:399280
TITLE: Xanthohumol metabolites in feces of rats
AUTHOR(S): Nookandeh, Aslieh; Frank, Norbert; Steiner, Frank; Ellinger, Renate; Schneider, Bernd; Gerhauser, Clarissa; Becker, Hans
CORPORATE SOURCE: Institute for Pharmacognosy and Analytical Phytochemistry, University of the Saarland, Saarbrucken, 66041, Germany
SOURCE: Phytochemistry (Elsevier) (2004), 65(5), 561-570
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Xanthohumol (1), isolated from hop, was fed to rats in a dose of 1000 mg kg-1 body weight The feces of the animals were collected after 24 and 48 h and analyzed for metabolites of 1. Approx. 89% of the recovered flavonoid-compds. consisted of unchanged 1. Sixteen metabolites and six previously known metabolites were isolated and characterized by coupling techniques (HPLC-NMR, HPLC-MS and HPLC-DAD). Their structures were elucidated by spectroscopic methods, especially using NMR spectroscopy. Twenty metabolites had a modified chalcone structure and two metabolites were flavanone derivs.

IT 688359-98-0
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(xanthohumol metabolites in feces of rats)
RN 688359-98-0 CAPLUS
CN 2-Propen-1-one, 1-[2,4-dihydroxy-3-(3-hydroxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-, (2E)- (CA INDEX NAME)

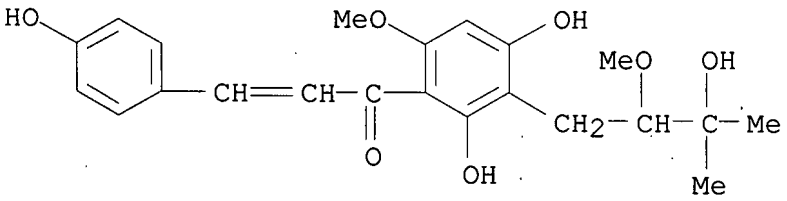
Double bond geometry as shown.



CC 1-2 (Pharmacology)
IT 6754-58-1, Xanthohumol 70872-29-6, Isoxanthohumol 189299-05-6
250603-94-2 274675-25-1 688359-98-0 688359-99-1
688360-00-1 688360-01-2 688360-02-3 688360-03-4 688360-04-5
688360-05-6 688360-06-7 688360-07-8 688360-08-9 688360-09-0
688360-10-3 688360-11-4 688360-12-5 688360-13-6 688360-14-7
688360-15-8
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(xanthohumol metabolites in feces of rats)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:363073 CAPLUS
DOCUMENT NUMBER: 139:332335
TITLE: Inhibitors of nitric oxide production from hops (Humulus lupulus L.)
AUTHOR(S): Zhao, Feng; Nozawa, Hajime; Daikonnya, Akihiro; Kondo,
Keiji; Kitanaka, Susumu
CORPORATE SOURCE: Central Laboratories for Key Technology, Kirin Brewery
Co., Ltd., Kanagawa, 236-0004, Japan
SOURCE: Biological & Pharmaceutical Bulletin (2003), 26(1), 61-65
CODEN: BPBLEO; ISSN: 0918-6158
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Nitric oxide (NO) plays an important role in many inflammatory responses
and is also involved in carcinogenesis. In the present study, we investigated the inhibitory effect of exts. from Humulus lupulus L. on both the production of NO and the expression of inducible NO synthase (iNOS)
in mouse macrophage RAW 264.7 cells. The production of NO was induced by a
combination of lipopolysaccharide (LPS) and IFN-γ, and determined by Griess assay. The expression of iNOS was detected by Western blotting. The LPS/IFN-γ-induced production of NO and expression of iNOS were significantly inhibited by the Et acetate soluble fraction of Humulus lupulus
L. Through bioactivity guided fractionation, humulene, five chalcones, 2,2-di-(3-methyl-2-butyleyl)-4,5-dihydoxy- cyclopent-4-en-1,3-dione, lupulone and three of its derivs. were isolated from the Et acetate soluble
fraction. The chalcones, including xanthohumol, significantly inhibited
the production of NO by suppressing the expression of iNOS.
IT 613683-49-1P

RL: ADV (Adverse effect, including toxicity); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(preparation and structure activity of nitric oxide inhibitors extracted from
hops)
RN 613683-49-1 CAPLUS
CN 2-Propen-1-one,
1-[2,4-dihydroxy-3-(3-hydroxy-2-methoxy-3-methylbutyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



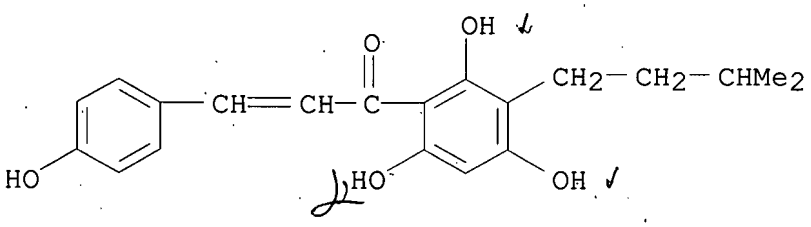
CC 1-3 (Pharmacology)
Section cross-reference(s): 11
IT 94-41-7P, Chalcone 468-28-0P 1891-42-5P 6753-98-6P, Humulene 6754-58-1P, Xanthohumol 29366-64-1P 102448-00-0P 189308-10-9P, Xanthohumol B 274675-25-1P, Xanthohumol D 613683-49-1P 613683-50-4P 613683-51-5P
RL: ADV (Adverse effect, including toxicity); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(preparation and structure activity of nitric oxide inhibitors extracted from
hops)
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:614230 CAPLUS
DOCUMENT NUMBER: 111:214230
TITLE: Preparation and formulation of chalcone derivatives as
aldose reductase inhibitors
INVENTOR(S): Chin, Masao; Sato, Shunji; Hosaka, Kunio; Mihashi, Hiroshi
PATENT ASSIGNEE(S): Tsumura and Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01013019	A	19890117	JP 1987-142166	19870609
PRIORITY APPLN. INFO.:			JP 1987-142166	19870609

OTHER SOURCE(S): MARPAT 111:214230
GI For diagram(s), see printed CA Issue.
AB Chalcone compds. (I; X = Y = H, XY = bond; R1 = OH, AcO, HO2CCH2O, MeO2CCH2O; R2 = isoprenyl isopentyl, Pr, H; R3 = OH, MeO; R4, R5 = H, OH, MeO) effective reductase inhibitors, are prepared Condensation of ketone II (preparation given) with aldehyde III (preparation given) in KOH-EtOH gave 78.3% unsatd. ketone IV which was hydrogenated over 5% Pd-C to give 97.3% saturated ketone. Hydrolysis of the saturated ketone in HCl-MeOH gave 39.0% I (X = Y = H, R1 = R3 = R5 = OH; R2 = R4 = H) (V) which (5.0 %) was formulated with 150 mL polysorbate-80 and 4.85 L sterilized saline to make injection vials containing 10 mg V each. V showed 99.0% inhibition of aldose reductase in rat lens at 10-4M.
IT 112772-81-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as aldose reductase inhibitor)
RN 112772-81-3 CAPLUS
CN 2-Propen-1-one, 3-(4-hydroxyphenyl)-1-[2,4,6-trihydroxy-3-(3-methylbutyl)phenyl]- (9CI) (CA INDEX NAME)



IC ICM A61K031-12
ICS A61K031-22; A61K031-235; C12N009-99
ICA C07C049-82; C07C049-84; C07C069-12; C07C069-708; C07C069-94
CC 25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 63
IT 60-82-2P 21849-70-7P 23130-26-9P 57765-66-9P 73692-51-0P 100634-10-4P 112772-63-1P 112772-71-1P 112772-73-3P 112772-74-4P

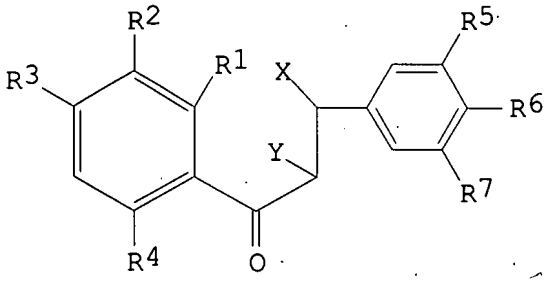
112772-79-9P 112772-80-2P 112772-81-3P 112772-82-4P
118055-99-5P 118056-04-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as aldose reductase inhibitor)

L16 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:23539 CAPLUS
DOCUMENT NUMBER: 110:23539
TITLE: Antiulcer agents containing chalcone derivatives as effective ingredients and novel chalcone derivatives
INVENTOR(S): Komazawa, Yukio; Takeda, Shigehumi; Hosaka, Kunio; Mitsuhashi, Hiroshi; Watanabe, Toshihiko
PATENT ASSIGNEE(S): Tsumura Juntendo, Inc., Japan
SOURCE: PCT Int. Appl., 256 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8804288	A1	19880616	WO 1987-JP973	19871212
W: HU, KR, US				
RW: AT, BE, CH, DE, FR, GB, IT, NL				
JP 63150241	A	19880622	JP 1986-294952	19861212
JP 01042422	A	19890214	JP 1987-198197	19870810
EP 292576	A1	19881130	EP 1988-900102	19871212
R: AT, BE, CH, DE, FR, GB, IT, LI, NL				
HU 52026	A2	19900628	HU 1988-311	19871212
HU 203515	B	19910828		
US 5106871	A	19920421	US 1991-733003	19910719
US 5234951	A	19930810	US 1991-797063	19911125

PRIORITY APPLN. INFO.:	JP 1986-294952	A	19861212
	JP 1987-198197	A	19870810
	WO 1987-JP973	W	19871212
	US 1988-237850	B1	19880720
	US 1989-436088	B1	19891109
	US 1991-733003	A3	19910719

OTHER SOURCE(S): MARPAT 110:23539
GI



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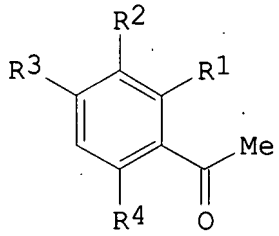
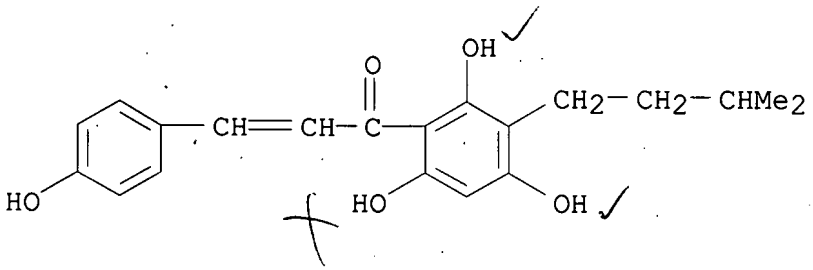


IV

AB Ulcer inhibitors containing chalcone derivs. I (X, Y = H or XY = bond; R1 = OH, AcO, HO2CCH2O, MeO2CCH2O; R2 = H, isoprenyl, isopentyl, Pr; R3 = OH, Me; R4 = H, OH, MeO; R5 = H, OH, MeO, isopentyl; R6 = OH, MeO, MeO2C; R7 = H, MeO) (II) and chalcone derivs. I (X, Y, R2, R3, R4, R6, R7 as specified above; R1 = OH, HO2CCH2O; R5 = H, OH, MeO; but R6 = MeO when R5 = OH, R6 = OH when R5 = MeO; etc.) (III) are prepared To a mixture of an acetophenone IV (R1 = R3 = R4 = OH, R2 = H) and K2CO3 in THF was added dropwise ClCH2CH:CMe2 and the mixture was further stirred 2 days to give 34.0% IV (R1 = R3 = R4 = OH, R2 = Me2C:CHCH2) which was stirred 1 h with (Me2CH)2EtN in THF and to the resultant stirred mixture was added dropwise ClCH2OMe to give IV (R1 = OH; R3 = R4 = MeOCH2O; R2 = Me2C:CHCH2) (V). V and 3-methoxy-4-methoxymethoxybenzaldehyde in EtOH were condensed by addition of saturated KOH in aqueous EtOH at 0° and stirring the resultant mixture 15 h at room temperature to give 57.0% diphenylpropenone I (XY = bond, R1 = OH, R2 = Me2C:CHCH2, R3 = R4 = R6 = MeOCH2O, R5 = MeO, R7 = H) which was hydrogenated over 5 % Pd-C to give 93.8% diphenylpropanone I (X = Y = R7 = H, R1 = OH, R2 = isopentyl, R3 = R4 = R6 = MeOCH2O, R5 = MeO) which was hydrolyzed to give 50.9% chalcone derivative III (X = Y = R7 = H, R1 = R3 = R4 = R6 = OH, R2 = isopentyl, R5 = MeO). At 100 mg/kg, p.o., in rats, a similarly prepared chalcone derivative I (X = Y = H, R1 = HO2CCH2O, R2 = isopentyl, R3 = R6 = MeO, R4 = R5 = R7 = H) (VI) gave 93% inhibition against rat stomach ulcer induced by 1 mL EtOH, p.o. At >1 g/kg, p.o., II and/or III caused no death in rats. An injection liquid as an ulcer inhibitor was formulated by mixing 7.5 g VI, 150 mL polysorbate 80, and

4.85 L physiolog. saline solution
IT 112772-81-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as ulcer inhibitor)
RN 112772-81-3 CAPLUS
CN 2-Propen-1-one, 3-(4-hydroxyphenyl)-1-[2,4,6-trihydroxy-3-(3-methylbutyl)phenyl]- (9CI) (CA INDEX NAME)



IC C07C049-82; C07C049-84; C07C059-70; C07C069-21
CC 25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 63
IT 60-82-2P 13745-20-5P 73692-51-0P 112772-63-1P 112772-65-3P
112772-66-4P 112772-67-5P 112772-69-7P 112772-71-1P
112772-73-3P
112772-74-4P 112772-76-6P 112772-78-8P 112772-79-9P
112772-80-2P
112772-81-3P 112772-82-4P 118055-95-1P 118055-96-2P
118055-98-4P 118056-01-2P 118056-04-5P 118056-07-8P
118056-08-9P
118056-09-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as ulcer inhibitor)

L16 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:74984 CAPLUS
DOCUMENT NUMBER: 108:74984
TITLE: Preparation of chalcone derivatives as hyaluronidase inhibitors
INVENTOR(S): Hosaka, Kunio; Chin, Masao; Mihashi, Hiroshi
PATENT ASSIGNEE(S): Tsumura Juntendo, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62185037	A	19870813	JP 1986-26775	19860212
PRIORITY APPLN. INFO.:			JP 1986-26775	19860212

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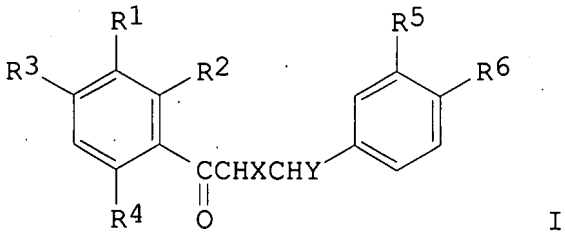

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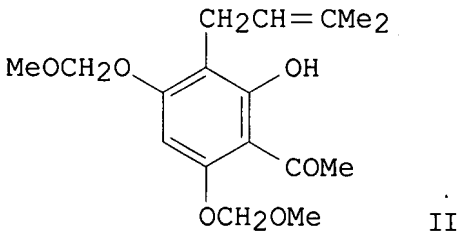


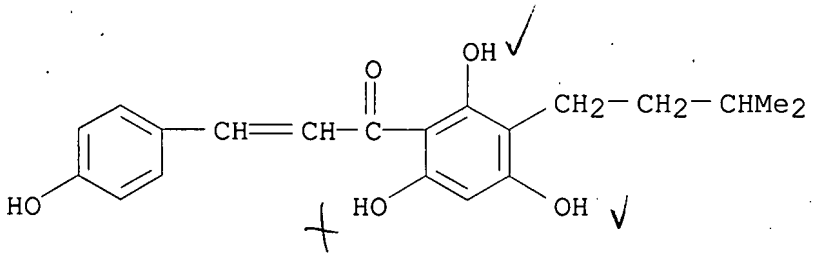
II

AB Chalcone derivs. (I; R1 = isoprenyl, isopentyl, H; R2 = H, OH, AcO, HO2CCH2O, MeO2CCH2O; R1 = OH, MeO, PhCH2O; R4 = H, OH, MeO, PhCH2O; R5 = H, OH, MeO, Me2CHCH2; R6 = OH, MeO; X, Y = H, XY = bond), useful as hyaluronidase inhibitors, are prepared Condensation of acetophenone derivative II with p-MeOCH2OC6H4CHO over MeONa-MeOH gave 88.2% chalcone derivative I (R1 = isoprenyl, R2 = OH, R3 = R4 = R6 = MeOCH2O, R5 = H, XY = bond), which was refluxed in HCl-MeOH to give 27% hydroxy derivative I (R1 = isoprenyl; R2 = R3 = R4 = R6 = OH; R5 = H; XY = bond), which inhibited hyaluronidase by 88.3% at 1.0 g/mL.

IT 112772-81-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as hyaluronidase inhibitor)

RN 112772-81-3 CAPLUS

CN 2-Propen-1-one, 3-(4-hydroxyphenyl)-1-[2,4,6-trihydroxy-3-(3-methylbutyl)phenyl]- (9CI) (CA INDEX NAME)



IC ICM C07C049-83
ICS C07C049-84; C07C059-70; C07C069-14

ICA A61K031-12; A61K031-19; A61K031-22; C12N009-99

CC 25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1

IT 57765-66-9P 100634-10-4P 112772-73-3P 112772-74-4P 112772-75-5P 112772-76-6P 112772-77-7P 112772-78-8P 112772-79-9P 112772-80-2P 112772-81-3P 112772-82-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as hyaluronidase inhibitor)

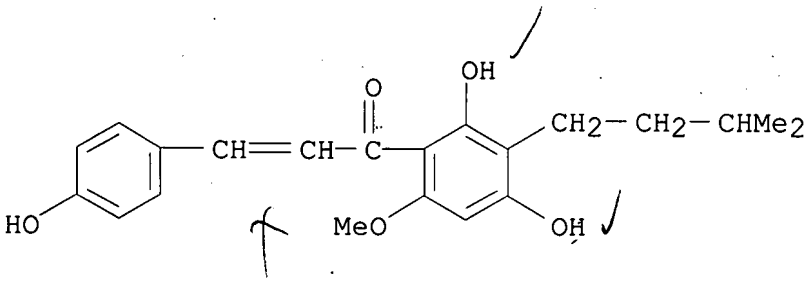
L16 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1961:105840 CAPLUS
DOCUMENT NUMBER: 55:105840
ORIGINAL REFERENCE NO.: 55:19917e-i
TITLE: An experimental contribution to the study of the isomerization of α,β and β,γ-unsaturated ketones
AUTHOR(S): Anteunis, M.
SOURCE: Verhandel. Koninkl. Vlaam. Acad. Wetenschap., Belg., Kl. Wetenschap. (1960), 22(No. 64), 1-86
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The mechanism of the isomerization of α,β and β,γ-unsatd. ketones in the presence of bases as described by Ingold, et al. (CA 20, 2823), was verified when the hindered 1-phenyl-2,2,3-trimethylbut-3-en-1-one, b1 90°, did not isomerize in 5N NaOH in aqueous alc. With its explanation of a pos. β-C this mechanism agreed also with the observation of OH addns. to α,β-unsatd. ketones sometimes followed by a "retrograde aldol condensation." In this work β-addition converted chalcones to flavanones, but only if the chalcones had multiple phenolic OH groups. 4-Benzyloxy-2',4'-dihydroxy-6'-methoxychalcone (I), m. 216-18°, was treated with 5% KOMe solution for 5 min. After evaporation of the solvent, unreacted I was removed by hot extraction with Et2O, and the residue was recrystd. from aqueous Me2CO to give the corresponding flavanone, 2-(p-benzyloxyphenyl)-5-methoxy-7-hydroxy-4-chromone (II), m. 202-3°. At the m.p. II reverted to I. Xanthohumol (CA 51, 14706a; 52, 7243d) in 2-5% NaOH solution gave the expected flavanone, isoxanthohumol, m. 198°, in 95% yield. Attempts to repeat this ring closure with 2'-hydroxychalcone (isomeric mixture), m. 100-45°, and 2'-hydroxy-5'-methylchalcone, m. 142-3°, failed. An attempt to prepare bicoumarinyl by the method of Dyson and Fittig [Ann. 225, 275(1889)] from salicylaldehyde and Na succinate gave a 15% yield with a balance of 1,4-bis(o-hydroxyphenyl)butadiene-2,3-dicarboxylic anhydride, m. 330° (PhMe); the separation was carried out in CHCl3. An analogous reaction with o-methoxybenzaldehye produced 1,4-bis(o-methoxyphenyl)butadiene, m. 118° (C5H6-isooctane), in 8.5% yield and 1,4-bis(o-methoxyphenyl)butadiene-2-carboxylic acid, m. 179-80° (C6H5-isooctane).

IT 102447-96-1P, Chalcone, 2',4,4'-trihydroxy-3'-isopentyl-6'-methoxy-
RL: PREP (Preparation)
(preparation of)

RN 102447-96-1 CAPLUS

CN Chalcone, 2',4,4'-trihydroxy-3'-isopentyl-6'-methoxy- (6CI) (CA INDEX NAME)



CC 10G (Organic Chemistry: Heterocyclic Compounds)
IT 708-53-2P, Acetophenone, 2',3'-dihydroxy-4'-methoxy- 2243-53-0P, 3-Butenoic acid, 4-phenyl- 4168-01-8P, 3-Butenoic acid, 2,2,3-trimethyl-
13389-88-3P, Succinic acid, (α-hydroxybenzyl)-, γ-lactone
23783-79-1P, 3,3'-Bicoumarin 38641-96-2P, 1,3-Butadiene, 1,4-bis(o-methoxyphenyl)- 96169-02-7P, Propiophenone, 2',4'-dihydroxy-3-(p-hydroxyphenyl)-3'-isopentyl-6'-methoxy-
100612-23-5P, 2-Pentenophenone, 2'-hydroxy-4,4'-dimethyl- 101109-98-2P,
3-Butenoic acid, 4-phenyl-, phenyl ester 102447-96-1P, Chalcone, 2',4,4'-trihydroxy-3'-isopentyl-6'-methoxy- 102448-00-0P, Propiophenone,
2',4'-dihydroxy-3-(p-hydroxyphenyl)-6'-methoxy-3'-(3-methyl-2-butenyl)-
109690-85-9P, Cinnamic acid, o-methoxy-α-(o-methoxystyryl)-
111385-02-5P, Succinic anhydride, disalicylidene- 112599-37-8P, Flavanone, 4'-(benzyloxy)-7-hydroxy-5-methoxy- 852638-51-8P, Flavone, 4',7-dihydroxy-5-methoxy-8-(3-methyl-2-butenyl)- 857402-56-3P, Flavone,
4',7-dihydroxy-8-isopentyl-5-methoxy-
RL: PREP (Preparation)
(preparation of)

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	96.31	451.96

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.26	-13.26

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